

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Philip Victor HARMAN

Serial No.: 09/586,869

Filed: June 5, 2000

For: IMPROVED IMAGE CONVERSION AND
ENCODING TECHNIQUES

Atty. Docket No.: 006020.00008

Group Art Unit: 2624

Examiner: Kim, C.

Confirmation No.: 7648

REPLY BRIEF

U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Appeal Brief - Patents
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

This is a Reply Brief in accordance with 37 C.F.R. § 41.37 in response to the Examiner's Answer mailed July 5, 2007. Please charge any necessary fees in connection with this Appeal Brief to our Deposit Account No. 19-0733.

Appellant hereby incorporates by reference all arguments set forth in the Appeal Brief filed February 27, 2007 in accordance with 37 C.F.R. § 41.37 in support of Appellants' November 30, 2006 Notice of Appeal. Appeal is taken from the Final Office Action mailed June 1, 2006, and the Advisory Action mailed October 11, 2006. In addition, Appellants respond herein as follows.

STATUS OF CLAIMS

Claims 1-3, 5-14, 18, 23, 27-33 and 43-44 are rejected, claims 15-17, 24-26 and 36-42 are canceled, and claims 45-51 have been allowed and claims 4, 19-22, 34 and 35 have been objected, but would be allowable if rewritten in independent form to include the subject matter of their base claim and any intervening claims.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-3, 13-14, 27, 32-33, and 43-44 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. patent no. 6,370,262 to Kawabata.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kawabata and U.S. patent no. 6,167,167 to Matsugu;

Claims 6-10 and 28-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kawabata and U.S. patent no. 6,029,173 to Meek;

Claims 11-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kawabata and U.S. patent no. 5,793,900 to Nourbakhsh;

Claim 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kawabata and U.S. patent no. 6,055,330 to Eleftheriadis; and

Claim 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawabata alone.

ARGUMENT

Appellant hereby maintains and incorporates by reference all arguments made in their Appeal Brief. In addition, Appellant submits the following clarifying arguments in response to the Examiner's Answer.

On page 11 of the Examiner's Answer, it is alleged that col. 6, lines 37-42 of Kawabata "teaches identifying the object by determining the outline (contour) of the object" and that "the contour of the object is determined without using distance measurement data." Appellant respectfully disagrees and continues to submit that Kawabata does not teach or suggest identifying at least one object with a 2D image *without using distance measurement data* as recited in claim 1 or allocating an object identifier to an object *without using distance measurement data* as called for in claim 27.

The section of Kawabata referenced in the Examiner's Answer discusses the memory portion 14 which contains the original data which has been reprocessed. As described at col. 5, lines 47-50 of Kawabata

Then such sub-processing is carried out that an amplifier 13 (which may be composed of a differentiator) emphasizes portions with strong contrast in each block, the thus emphasized data is transferred to a memory portion.

The key portion of this disclosure is that the amplifier 13 "emphasizes" portions of the image with strong contrast; it does not outline or determine the shape of any objects in the image and merely emphasizes edges (i.e., a high pass filter). The information in memory portion 14 is *unable* to outline or determine the shape of any objects. Notably, in Kawabata determining the shape of an object can only be achieved *in combination with the measured distance data* as

described in the sentence at col. 6, lines 44-48 immediately following the passage referenced in the Examiner's Answer:

Thus, for the blocks as determined as those of 2 m in FIG. 2B, it is determined from the data in the memory portion 14 which positions in the blocks correspond to the pixel portions in the above contour part.

To further reinforce this point it is instructive to consider the difference between a contour and an object outline. As known to those skilled in the art, a contour is a curve connecting points in a function of two variables where the function has the same particular value. Contour maps are generally used in topographic applications, but can be used to describe any smoothly varying data. A common use of contours is for atmospheric pressure systems. Tellingly, such pressure systems do not have a distinct outline or edge. A contour simply delineates an area of equal pressure.

A semantic object such as a car or person appearing in a digital image does not have contours. A single outline or shape defines the locations of such objects. Specifically, an object such as a low-pressure system can have an infinite number of contours while an object has only a single defining outline.

The point to be understood is that determining a contour for an object is not the same as determining an outline or shape of the object. In sum, the assertion in the Examiner's Answer that Kawabata teaches identifying an object by determining the contour of the object is misplaced. Moreover, Kawabata does not actually determine a contour. Instead Kawabata merely points out that areas of the image with strong contrast are "pixel portions in a contour part of an image". While high contrast areas occur in the contour part of the image, these areas do not in

and of themselves define a contour. In Kawabata, measured distance data is necessary to define a contour.

In view of the above, Appellant submits that Kawabata fails to teach or suggest identifying at least one object with a 2D image *without using distance measurement data* as recited in claim 1 or allocating an object identifier to an object *without using distance measurement data* as called for in claim 27.

CONCLUSION

For all of the foregoing reasons set forth in the Appeal Brief and herein, Appellant respectfully submits that the final rejection of claims 1-3, 5-14, 18, 23, 27-33 and 43-44 is improper and should be reversed.

Respectfully submitted,
BANNER & WITCOFF, LTD.

Dated: September 5, 2007

By: /Gary D. Fedorochko/
Gary D. Fedorochko
Registration No. 35,509

1100 13th Street, N.W., Suite 1200
Washington, D.C. 20005-4051
Tel: (202) 824-3000
Fax: (202) 824-3001
GDF:lab